

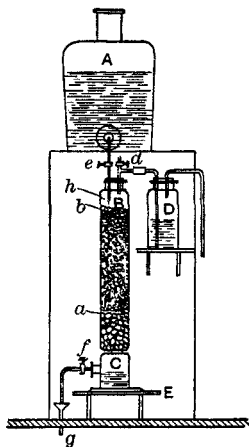
genius of our convention, will be remembered most gratefully by us all. I will not longer detain you from your personal farewells to each other, and now declare the Congress adjourned.

HYDROGEN SULPHIDE GENERATOR.

BY H. G. SCHANCHE.

Received September 13, 1894.

THE form of generator shown in the annexed cut has proved itself, during seven years of use, to always furnish an *absolutely uniform supply of gas*. The acid reservoir A delivers the acid into the generator B, containing ferrous sulphide, *a b*, resting on coarse pebbles at *a*. The ferrous chloride collects in C and may be drawn off, from time to time, by opening cocks *d* and *f*, thus allowing it to flow through the, lead pipe *g* into a drip-pan underneath the table; D is an ordinary bottle for washing the gas. By regulating the flow of acid by means of the cock *e*, any supply of gas may be obtained, while the height of the column of ferrous sulphide, through which the acid percolates, assures an absolutely uniform supply of gas, as well as a complete neutralization of the acid. The shelf E, on which the generator B rests, can be slipped off its bracket, thus facilitating the removal of B for cleaning or charging.



[CONTRIBUTIONS FROM THE CHEMICAL LABORATORY, U. S. DEPARTMENT OF AGRICULTURE, SENT BY H. W. WILEY, NO. 11.]

MODIFICATION OF KNORR'S EXTRACTION APPARATUS.

BY OMA CARR.

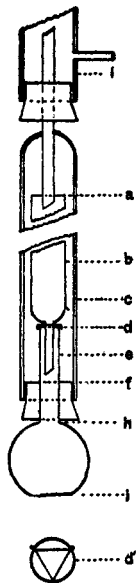
Received October 15, 1894.

TO avoid the inconveniences found with the usual form of mercury seal extractors,¹ such as the expense of flasks, disturbance of the seal by unequal pressures, tendency of the mercury to enter the flask, etc., the modification shown in the drawing is suggested.

The tube *a b* may be of any convenient size adapted to the

¹ Bulletin, No. 28, Division of Chemistry, p. 97.

inverted percolator-dome c. The top of the flask neck may be simply rounded in the flame, and the small triangle *d d'* arranged to support the shoulder of the tube *a b*. The length of the flask between points *d* and *h* may be any desired distance, but it is suggested that it protrude above the cork *f* two inches. The cork *f* requires no previous extraction, as the solvent in contact with it can not enter the flask containing the extract except by volatilization. The flask may be of any desired size, although the ordinary "sugar flask," of 100 cc. capacity, without rim at the mouth, will be found convenient for the greater range of work.



Where it is desired to complete extract solutions to a definite volume the arrangement will be found particularly useful. The apparatus should be sunk in a water-bath to a depth sufficient to prevent accumulation of the solvent upon the cork *f*. The apparatus is simple and readily adapted to the condenser of the Knorr extractor, shown at 1.

Upon completion of the extraction, the cork *f* is easily removed and the flask wiped and dried without danger or annoyance caused by mercury globules.

LABORATORY DEVICES.

BY ELWYN WALLER, PH.D.

Received October 17, 1894.

DURING the recent general meeting of the Society in Brooklyn, many of the members visited the mineral water establishment of Dr. C. H. Schultz, in New York, and enjoyed his hospitality. After the lunch, the different parts of the plant were inspected by the visitors. In the analytical laboratory were a few forms of apparatus which attracted much attention as they have heretofore not been described. These were the burette-filling device, designed by Dr. A. P. Hallock, the chemist of the factory, the condenser and revolving Nessler rack, adapted by E. W. Martin, of the New York Health Department, and the Nessler comparator as improved by Dr. Hallock.

A description of these may be of service.